REMARKS

Claims 1 and 14 are amended, no claims are canceled, and no claims are added; as a result, claims 1-16 are now pending in this application.

No new matter has been added through the amendments to claims 1 and 14.

Claim 1 has been amended by specifying that the decryptor processes ECMs to deliver decrypted control words for descrambling at least the first type of content signals so as to maintain at least the time slots for second type of content signals in the first type of content signals during playback of the program signal. Basis for this amendment is to be found on page 4, lines 8-9, page 2, lines 31-33 and page 5, lines 23-24. Further basis is to be found in claims 3 and 6, which make clear that the delivery of decrypted control words for descrambling forms the mechanism by means of which the presence of the time slots is enforced.

Claim 14 has been amended in substantially similar manner to claim 1. Basis for the amendments is provided by the same passages as identified above with regard to claim 1.

§103 Rejection of the Claims

§ 103(a) Rejection of claims 1-11 and 13-16

Claims 1-11 and 13-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Maillard (Patent No. EP 0912052 A1) in view of Morrison (U.S. 5,815,671) and in view of Wendorf (U.S. 5,469,431).

The proposed combination of Maillard, Morrison, and Wendorf, either alone or in combination, fails to disclose or suggest each of the elements included in claims 1-11 and 13-16.

Claim 1

The subject-matter of claim 1 is not taught or suggested by EP-A1-0 912 052 (also referred to as "D1"), because D1 does not disclose a plurality of ECMs comprising control information to control the decryptor in such a manner that the decryptor processes ECMs to deliver decrypted control words for descrambling at least the first type of content signals so as to

maintain at least the time slots for second type of content signals in the first type of content signals during playback of the content signal. Instead, a new ECM, indicated as ECM', is generated. This entitlement message ECM' is then used to replace the ECM in the scrambled data stream (column 10, lines 20-22). The entitlement message ECM' may be inserted in the data stream circulating a shift control register R (column 10, lines 25-27). Both the control word and access criteria are used to build an entitlement control message (column 7, lines 17-22), but the access criteria indicate only how the program is to be commercialised (column 7, lines 1-3).

The subject-matter of claim 1 is also not taught or suggested US 5,815,671 (also referenced to as "D2"), because D2 does not disclose that a scrambled program signal is broadcasted together with entitlement control messages (ECMs) containing the control words in an encrypted manner using a second key. Instead, D2 discloses only that a conditional access circuit decodes the received data as authorised by a microcontroller (column 5, lines 17-19), without specifying how the conditional access circuit obtains the requisite keys.

The subject-matter of claim 1 is further not disclosed or suggested by US 5,469,431 (also refered to as "D3"), because D3 does not disclose that a scrambled program signal is broadcasted together with entitlement control messages (ECMs) containing the control words in an encrypted manner using a second key. Instead, D3 discloses only that an optional third field in a Service Map table contains a control word sequence used in descrambling this service (column 6, lines 50-52).

For at least the reasons stated above, the proposed combination of Maillard, Morrison, and Wendorf fails to disclose or suggest each of the elements recited in claim 1, and so the 35 U.S.C. § 103(a) rejection of claim 1 cannot stand.

Claims 2-11 and 13

Claims 2-11 and 13 depend from claim 1, and therefore include all of the elements recited in claim 1. For at least the reasons stated above with respect to claim 1, the proposed combination of Maillard, Morrison, and Wendorf fails to disclose or suggest each of the elements

recited in claims 2-11, and 13, and so the 35 U.S.C. § 103(a) rejection of claims 2-11 and 13 cannot stand.

Claim 14

Claim 14 relates to a control device comprising a decryptor as defined in claim 1. From the discussion of claim 1 given above, it will be apparent that at least the decryptor renders method of claim 1 non-obvious, so that the control device comprising such a decryptor is thus non-obvious over the proposed combination of Maillard, Morrison, and Wendorf.

For at least the reasons stated above, the proposed combination of Maillard, Morrison, and Wendorf fails to teach or suggest each of the elements recited in claim 14, and so the 35 U.S.C. § 103(a) rejection of claim 14 cannot stand.

Claims 15-16

Claims 15-16 depend from claim 14, and therefore include all of the elements recited in claim 14. For at least the reasons stated above with respect to claim 14, the proposed combination of Maillard, Morrison, and Wendorf fails to teach or suggest each of the elements recited in claims 15-16, and so the 35 U.S.C. § 103(a) rejection of claims 15-16 cannot stand.

The Office Action fails to state a prima facie case of obviousness with respect to claims 1-11 and 13-16, because one or ordinary skill in the art would not be motivated to form the proposed combination of references as suggested in the Office Action.

The method defined in claim 1 differs from the one known from D1 in that D1 does not disclose that at least a plurality of ECMs comprises control information to control the decryptor in such a manner that the decryptor processes ECMs to deliver decrypted control words for descrambling at least the first type of content signals so as to maintain at least the time slots for second type of content signals in the first type of content signals during playback of the program signal.

One example effect of this difference is that the provider of a scrambled program signal obtained in the manner indicated in claim 1 is able to enforce the playback of both the first and second type of content signals.

The subject-matter of claim 1 is not obviously derivable on the basis of D1 in the light of any or both of D2 and D3, because the skilled person has no incentive to combine the teachings of D2 and D3 with those of D1, and because any such combination of teachings would not provide a method with all the limitations of claim 1.

The skilled person would not combine D2 with D1, because D1 and D2 contain incompatible and contradictory teachings. D1 teaches that it is inadvisable for descrambled digital data to be permitted to be recorded in view of the risks that arise in relation to unauthorised copying and piracy (column 10, lines 3-6). D2, on the other hand, teaches that a conditional access circuit decodes the received data as authorized by a microcontroller and provides the decoded data for storage in a receiver memory. Secondly, whereas D1 uses ECMs to control the descrambling in combination with a smart card (i.e. two-level encryption), there is no information in D1 and D2 on how to adapt the conditional access system of D2 to two-level decryption. Vice versa, there is no general teaching in D2 on how to use the Program Break Flags to insert a replacement ECM when the content carrying the Program Break Flags remains scrambled. Thirdly, the skilled person seeking to control the enforcement of time slots during playback would not turn to D2, because D2 discloses a technique for selectively encoding and presenting audio and video entertainment program materials and supporting message materials in response to a materials selection procedure which is predetermined *by a subscriber/user*, rather than enforced by a *provider*.

Even if the skilled person were to turn to D2, he would find no disclosure of messages comprising control information to control the decryptor in such a manner that the decryptor processes the messages to deliver decrypted control words for descrambling at least the first type of content signals so as to maintain at least the time slots for second type of content signals in the first type of content signals during playback of the program signal. In particular, D2 discloses

only a Program Break Flag in a program, which signals that a message is to be inserted. There is no information in the Program Break Flag itself to specify the duration of the time slot. The message to be inserted may contain time-related codes (column 7, line 48), but the examples given of time-related codes do not specify a time interval during playback. The code word labelled Time Period indicates the time of day the message is to be used (column 7, lines 52-54), for instance. More importantly, there is no disclosure in D2 of enforcing the maintenance of a time slot through the provision of control words for descrambling a first type of content signal.

The skilled person would not combine D3 with D1 or D2 either. The method of D3 is not compatible with that of D1, because control words are described as optional (column 6, lines 50-52), and because there is no disclosure in D3 of a two-level or multi-level key hierarchy for scrambling a service. The method of D3 is not compatible with that of D2 because D3 discloses no provision for selecting and storing more than one service, whereas, according to D2, program material and message materials are received separately and stored (see column 6, lines 26-29). D3 discloses frequency multiplexing and only one tuner, but no storage (column 8, lines 8-26). This would make it impossible to receive message materials as a separate service. Furthermore, the skilled person seeking to modify D1 would not turn to D3, because D3 concerns a different problem. D3 relates only to the de-multiplexing of services.

Even if the skilled person were to turn to D3, he would find no disclosure of a plurality of ECMs comprising control information to control a decryptor in such a manner that the decryptor processes ECMs to deliver decrypted control words for descrambling at least the first type of content signals so as to maintain at least the time slots for second type of content signals in the first type of content signals during playback of the program signal. Instead, D3 discloses that a user chooses a service from a menu and that data from a Service Map Table and Channel Map table is used to locate and decode the information constituting the service selected (column 8, lines 27-32). The Service Map Table contains an absolute service identification number (SID) or a Relative SID (column 6, lines 54-56). The SID appears in the header of each packet or information stream portion (column 5, lines 5-7). D3 teaches away from maintaining time slots in that it discloses that the decoder converts a coded digital data stream, with time division

multiplexed services, into video suitable for a monitor (column 8, lines 23-26). Thus, time slots are actually removed.

For at least the reasons stated above, the Office Action fails to state a *prima facie* case of obviousness with respect to claims 1-11 and 13-16, and so Applicant respectfully requests withdrawal of the rejection and reconsideration and allowance of claims 1-11 and 13-16.

§ 103(a) Rejection of claim 12

Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Maillard (Patent No. EP 0912052 A1) in view of Morrison (U.S. 5,815,671) and in view of Wendorf (U.S. 5,469,431) and in view of Takahisa (U.S. 5,577,266).

Claim 12 depends from claim 1, and therefore includes all of the elements recited in claim 1. Applicant believes they have established that the proposed combination of Maillard, Morrison, and Wendorf fails to disclose or suggest each of the elements recited in claim 1. Therefore, the proposed combination also fails to disclose or suggest each of the elements recited in claim 12. Applicant's representatives fail to find, and the Office Action fails to point out, where these elements missing from the proposed combination of Maillard, Morrison, and Wendorf are found in the additional reference of Takahisa.

Thus, the proposed combination of Maillard, Morrison, Wendorf, and Takahisa fails to disclose or suggest each of the elements included in claim 12. Therefore, the 35 U.S.C. § 103 rejection of claim 12 cannot stand.

Also, and for at least the reasons stated above, one of ordinary skill in the art at the time of the invention would not be motivated to combine, Maillard, Morrison, and Wendorf. Therefore, the Office Action fails to establish a proper basis for forming the proposed combination of Maillard, Morrison, Wendorf, and Takahisa. Thus the Office Action fails to establish a *prima facie* case of obviousness with respect to claim 12.

For at least the reasons stated above, Applicant respectfully requests withdrawal of the rejection, and reconsideration and allowance of claim 12.

Reservation of Rights

Applicant does not admit that references cited under 35 U.S.C. §§ 102(a), 102(e), 103/102(a), or 103/102(e) are prior art, and reserves the right to swear behind them at a later date. Arguments presented to distinguish such references should not be construed as admissions that the references are prior art.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at 408-278-4042 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28 day of February, 2006.

Dawn R. Shaw

Name

Signature